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To: F. L. Steahly

Durth James 4/24/05
Technical Information Officer Date I

Date: September 26, 1950

From: W. K. Eister, W. E. Dougher, and P. B. Orr

Subject: THE OPERATION OF THE OAK RIDGE NATIONAL LABORATORY BURIAL GROUND

In the course of the research, development, and production work related to the Atomic Energy program, a significant amount of solid material becomes contaminated with radioactive isotopes. In many cases this contaminated solid material is not of sufficient value to attempt to remove the radioactivity from the material. The radioactivity contained on the solid material is such that it cannot be diposed of through the normal channels because of the biological hazard that it would create. It is, therefore, necessary to store it in some fashion so as not to create a hazard.

At Oak Ridge National Laboratory, a burial ground has been set up for this purpose, and at the present time, it receives solid contaminated material from the Oak Ridge area, from areas such as Mound Laboratory, Argonne National Laboratory, and also from some non-commissioned users of radioisotopes.

As a result of the operation of this burial ground for seven years, approximately six acres of ground has been utilized. The No. 1 Burial Ground was a quarter acre plot of ground which lay 200 feet west of the incinerator. The No. 2 Burial Ground is a one to two acre tract of land which lays on the south side of the hill, east of the Pile Building. The No. 3 Burial Ground has an area of four acres and is located approximately a half mile west of the 703-C Building. At the present time, the No. 1 and No. 2 Burial Grounds are inactive. The No. 3 Burial Ground is almost full and a No. 4 Burial Ground that will be located south of the Laboratory in the area toward the White Wing Gate is now being made available for this purpose.

The operation of the burial ground requires about two men full time. Once each week a shovel is operated to extend a fifteen foot deep ditch. The beta and gamma contaminated material is placed in the ditch until it is approximately two-thirds full. A bulldozer is then used to cover the ditch with dirt. In the event that the solid material is contaminated with alpha, a ditch large enough for waste is dug. The waste material is placed in the hole, partially covered with dirt, and then a six inch pad of concrete is poured, and finally it is covered with dirt. The purpose of the concrete pad is to prevent digging up the alpha contaminated material by mistake.

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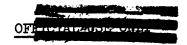
E. J. Murphy 11-1-50

For: M. T. Brop, Supervisor : C. Laboratory Records Bapt.

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ChemRisk Document No. 1604

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F. L. Steahly

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The cost of the burial ground operation is estimated to be \$50,000 to \$75,000 per year. This does not include the cost of collection of the waste.

WKE:sjp

cc: JODavis

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Victor Aller